

REMARKS

Applicants thank the Examiner for the thorough consideration given the present application. Claims 1, 2, 6 and 7 are currently being prosecuted. The Examiner is respectfully requested to reconsider his rejections in view of remarks as set forth below.

Rejection under 35 U.S.C. § 103

Claims 1, 2, 6 and 7 stand rejected under 35 U.S.C. § 103 as being obvious over the admitted prior art in view of Herman (U.S. Patent No. 4,325,063) and Taguchi et al. (U.S. Patent 6,181,317). This rejection is respectfully traversed.

The Examiner points out that the admitted prior art teaches a series of steps related to paragraphs (a) to (e). The Examiner admits that the admitted prior art does not show the rising edge or falling edge of the vertical synchronizing signal generating start vertical signal before the end of the vertical blank period after at least a gate clock cycle during the blank period.

The Examiner relies on Taguchi et al. to teach after an edge of the vertical synchronizing signal, generating start vertical signals for the end of the vertical blank period after at least a gate clock cycle during a vertical blank period. The Examiner feels that it would have been obvious to incorporate this teaching into the method of the admitted prior art. However, the Examiner admits that the admitted prior art and Taguchi et al. did not show pausing the output of CPV and OE until the end of the vertical blank period.

The Examiner relies on Herman to teach the pausing of OE until the end of the vertical blank period. The Examiner feels it would have been obvious to pause the output of CPV and OE until the end of the vertical blank period as shown by Herman and the combined system of the admitted prior art of Taguchi et al. The Examiner applies this same rejection to both claims 1 and 6. As to dependent claims 2 and 7, the Examiner states that the admitted prior art teaches that the start vertical signals are generated after at least a third cycle after the start of the vertical blank period.

Applicants disagree that the claims of the present invention are obvious over this combination of references. First, Applicants submit that it would not be obvious for one with ordinary skill in the art to make the combination of these three teachings. There is no motivation seen for adding the teachings of Herman or Taguchi et al. to the admitted prior art of the present application. Even if the secondary references teach the features suggested by the Examiner, there is no indication as to why such features should be added to the admitted prior art.

Furthermore, it is also not clear that this would even produce a workable system. Changing the location of various signals and their starting and ending positions is not easily transferable from one system to another. Thus, features that may work well in Taguchi et al. and Herman, may not work well at all with the admitted prior art. Accordingly, Applicants submit that the combination would also not be obvious because the workability of the combination has not been seen.

Concerning the Herman reference, and as described in the previous amendment, after the end of the vertical blanking, the first signal on line CLP causes control unit CTR to terminate the signal on line OE. That is, the signal on line OE begins being paused after the end of the vertical blanking. This differs from the description in paragraph f of claims 1 and 6 that after generating the start vertical signals, OE as well as CPV and STV1 are paused until the end of the vertical blank period. That is, in the present invention, the gate on line enable signals begin being paused before the end of the vertical blank period while Herman teaches that the signal begins being paused after the end of the vertical blanking period.

In regard to Taguchi et al., the Examiner cites this reference to show generating start vertical signals before the end of the vertical blank period after at least one gate clock cycle during the vertical blank period. However, this reference does not teach a relationship between the start vertical signal and pausing a gate-on enabling signal OE. Thus, Taguchi et al. does not teach this feature at all.

Applicants submit that even if the admitted prior art is combined with Herman and Taguchi et al., the combination still does not teach that after the start vertical signals are generated, the gate-on enable signal is paused until the end of the vertical blank period. There is also no reason why this teaching would be obvious to one skilled in the art in view of these references.

This differs from the present invention which, as described in paragraph f of claims 1 and 6, after the start vertical signals are generated, the gate-on enable

signals are paused until the end of the vertical blank period. That is, the gate-on enable signal begins being paused before the end of the vertical blank period. In view of this, Applicants submit that both claims 1 and 6 are allowable over this combination of references.

Claims 2 and 7 depend from claims 1 and 6 and as such are also considered to be allowable.

Conclusion

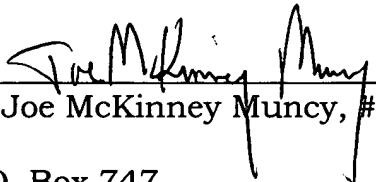
In view of the above remarks, it is believed that the claims clearly distinguish over the patents relied on by the Examiner, either alone or in combination. In view of this, reconsideration of the rejections and allowance of all the claims are respectfully requested.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Robert F. Gnuse (Reg. No. 27,295) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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